

Air Pollution Control Division

Colorado Department of Public Health and Environment

Guidance Document - Form APCD-203 <u>Fugitive Component Leaks</u> Air Pollutant Emissions Notice (APEN) Ver. November 13, 2014

The following guidance document is intended to provide further detail on completing the Air Pollutant Emissions Notice (APEN). Please include the permit number and AIRS ID of the reported equipment if the Air Pollution Control Division (APCD) has previously assigned these numbers. Otherwise, please leave these spaces at the top of the form blank.

The APEN submitted is valid for five (5) years from the date it is received by the APCD. An APEN update must be submitted to the APCD no later than 30 days before this 5-year term expires.

The applicant must submit a \$152.90 filing fee with each Fugitive Component Leak APEN submitted. The application will not be processed without an APEN filing fee.

An applicant may group emission points on a single APEN according to Regulation No. 3, Part A, II.B.4. *Guidance on emissions source grouping may be found online at*: https://www.colorado.gov/pacific/sites/default/files/AP_Memo-95-13-Grouped-Air-Pollutant-Emission-Notice-%28APEN%29-Requirements.pdf

Section 01 - Administration Information

This section contains general information for the company.

NAICS codes: can be found online at- www.naics.com/search.htm

SIC codes: can be found online at- www.osha.gov/pls/imis/sicsearch.html

Section 02 - Requested Action

Guidance on Revised APENs may be found online at:

www.colorado.gov/pacific/sites/default/files/AP_Memo-02-01-Revised-Air-Pollution-Emission-Notices-%28APENs%29-Construction-Permit-Requirements.pdf

Request for NEW permit: Check box if source has not been assigned a permit number and you are applying for a new permit.

Request MODIFICATION to existing permit: Check box if source already has a permit issued and you would like to modify the permit. Specify all the modifications you are requesting in an attached cover letter.

Request to limit HAPs PTE: Check box if your equipment has the potential to emit Hazardous Air Pollutants (HAPs) at Major Source levels (10 ton/yr of any HAP, or 25 ton/yr of any combination of HAPs), and you would like a permit limit to reduce the potential below Major Source levels. Guidance regarding HAP PTE can be found online at-

www.colorado.gov/pacific/sites/default/files/AP_Memo-97-01-Air-Pollution-Emissions-Notice-%28APEN%29-Exempt-Emission-Units-and-Synthetic-Minor-Permits.pdf

APEN Submittal for update only: Check this box to update your APEN without any permit modifications. If you submit an APEN to update your actual calendar year emissions, this will also update the 5-year APEN term. Please review your previously submitted APEN, and verify that no changes have occurred prior to submittal of an APEN update.

Other than the 5 year expiration date, a revised APEN must be submitted:

- Prior to the installation of new, or replacement of equipment or pollution control equipment.
- Prior to any change in the ownership or operator of a facility or location.
- To change a permit limit or condition.
- Whenever a significant change in annual (calendar year) actual emissions occurs.

A significant change for a criteria pollutant is defined as:

Sources which emit 100 tons per year or more: any change of 5% or 50 tons/year or more of actual emissions, whichever is less.

Sources which emit <u>less than 100 tons per year</u>: any change of 5 tons/year or more of actual emissions, except for sources of volatile organic compounds and nitrogen oxides in ozone nonattainment areas which must report any change of 1 ton/year <u>or</u> 5% of actual emissions, whichever is greater.

A significant change for Non-Criteria Reportable Air Pollutants (See Regulation 3, Part A, Appendix A) is defined as:

Any increase of 50% or 5 tons/year of actual emissions, whichever is less.

Please Note: For an APEN to be considered complete, all appropriate fields for current operating and company data must be filled out. The application will not be accepted if all fields are not completed.

Section 03 - General Information

Provide overall source schedule, times, dates of commencement of operation, and describe the facility type.

When selecting the facility type, the following definitions should be followed:

Well Production Facility is defined in Regulation 7, XVII.A.17 as:

All equipment at a single stationary source directly associated with one or more oil wells or gas wells. This equipment includes, but is not limited to, equipment used for storage, separation, treating, dehydration, artificial lift, combustion, compression, pumping, metering, monitoring, and flowline.

Natural Gas Compressor Station is defined in Regulation 7, XVII.A.10 as:

A facility, located downstream of well production facilities, which contains one or more compressors designed to compress natural gas from well pressure to gathering system pressure prior to the inlet of a natural gas processing plant.

Natural Gas Processing Plant is defined in Regulation 7, XVIII.B.5 as:

Any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both.

Please note if your facility is located in a non-attainment area for any *National Ambient Air Quality Standard* (NAAQS) criteria pollutant (Nitrogen Oxide, Sulfur Dioxide, Ozone, Volatile Organic Compounds, PM₁₀, PM_{2.5}, TSP, Carbon Monoxide, Lead). This website will direct you to those areas that are designated as attainment/non-attainment-www.colorado.gov/cdphe/state-implementation-plans-sips

Section 04 - Regulatory Information

Check appropriate box based on your assessment of the noted regulations. .

Section 05 - Stream Constituents

Fill in appropriate stream composition in weight percent for each service type. A representative extended gas and/or extended liquid analysis, including BTEX, should be supplied to support the data provided.

Section 06 - Location Information

The location data for fugitive component leaks should be based on the plant locations.

<u>Horizontal Datum (NAD27, NAD83, WGS84)</u>: The horizontal geodetic datum of the source location coordinates. One of the following datum must be referenced: NAD27, NAD83, WGS84.

<u>Latitude/Longitude OR UTM description</u>: provide one or the other. These are coordinate systems and a means for identifying a point on the earth on a planimetric map. These can be found using Internet tools such as Google Earth or obtained from a georeferenced plot plan of the facility. UTM descriptions will include a zone number.

<u>Method of Collection for Location Data</u>: Identify how the Latitude/Longitude or UTM coordinates were obtained. Methods include: map (identify map name or type), GPS, GoogleEarth, etc.

Section 07 - Leak Detection & Repair (LDAR) & Control Information

Check appropriate boxes to identify if a LDAR program is applied at the source. If LDAR is required per NSPS KKK or NSPS OOOO, then check a box to indicate the monitoring frequency of the control program. The given control percentages may be applied at natural gas processing plants that follow either monthly or quarterly monitoring that complies with monitoring provisions of either NSPS KKK or NSPS OOOO, whichever is applicable to the source.

Section 08 - Emission Factor Information

Check the appropriate box indicating the source of emission factors used in determining emissions. Acceptable emissions factors are found in EPA's "Protocol for Equipment Leak Emission Estimates", document reference number: *EPA*-453/R-95-017. Depending on type of facility and date of commencement of operation, emission factors selected may be from either Table 2-4 or Table 2-8 of this document.

Table 2-4, also called "Average Emission Factors", shall be used to estimate uncontrolled actual emissions at the following types of facilities:

- All Natural Gas Processing Plant Facilities
- Well-Production Facilities constructed before October 15, 2014
 - Until the well production facility reaches the phase-in date for implementing LDAR in Regulation 7, XVII.F.4 - Table 4
- Natural Gas Compressor Stations
 - o Before January 1, 2015
- All "Other" facilities

Table 2-8, also called "Screening Emission Factors", have been approved for a specific subset of oil and gas industry facilities through Regulation 7, Section XVII.F. The following facilities may use the Table 2-8 emissions factors labeled "<10,000 ppmv Emission factor (kg/hr/source)" to estimate uncontrolled actual emissions on the APEN form:

- Well Production Facilities
 - o All facilities constructed after October 15, 2014
 - For facilities constructed before October 15, 2014 upon reaching the phase-in date for implementing LDAR under in Regulation 7, XVII.F.4 - Table 4
- Natural Gas Compressor Stations
 - o On and After January 1, 2015

List the number of components and associated emission factor, with units (i.e., lb/hr-component) used to estimate actual emissions for each service type.

Method for determining component count should be identified by checking either the "Estimated Count" or "Actual Count" box. Provide supporting documents to substantiate component count and date actual count conducted if applicable.

Section 09 - Emissions Inventory Information & Emission Control Information

<u>Actual Calendar Year Emissions</u>: The actual amount of emissions emitted annually. These emissions should be based on stream composition in Section 05 and component counts provided in Section 08. Use the previous calendar year for the basis of emissions if possible. Note the data year (in the box above) that was used to determine these actual emissions.

"Uncontrolled" = calculated emissions prior to taking any credit for reductions due to an emissions control device.

"Controlled" = calculated emissions taking credit for emissions reductions achieved by implementing LDAR or other control program.

Requested Permitted Emissions: This level will be your permit limit (maximum allowed). The operator may request permitted emissions in excess of "actual calendar year" emissions to account for variations in component counts and gas composition.

<u>Emission Method or Factor Source</u>: Identify how your emissions were estimated. Example emission factor sources/methods include: EPA's 1995 Protocol for Equipment Leak Emission Estimates. If emission estimations are based upon methods other than those supplied by the Division or EPA, sufficient supporting documentation must be included.

Section 10 - Applicant Certification

Signature, date signed, printed name and title of person legally authorized to supply data must be provided.

Additional guidance can be obtained here:

The Air Pollution Control Division at (303) 692-3150, or at their website-

www.colorado.gov/pacific/cdphe/oil-and-gas-industry-air-permits

The Small Business Assistance Program at (303) 692-3175, (303) 692-3148, or at their websitewww.colorado.gov/cdphe/small-business-assistance-program-sbap